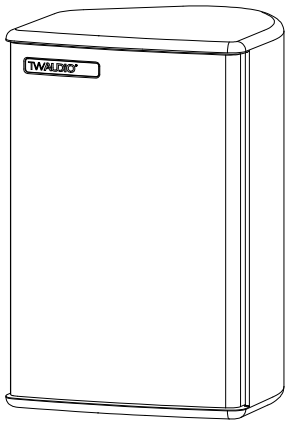
TWAUDIO®

C5i | Operation manual



Introduction

Thank you for choosing a high-quality product “MADE IN GERMANY” from the brand TW AUDiO.

Our versatile C5 compact loudspeaker was the inspiration for the C5i. In the identical weather-proof PU enclosure, the C5i uses a newly developed, inexpensive 5“ chassis with a central dome-tweeter. As with the C5, this coaxial structure results in a radial and ideally homogeneous radiation behavior.

As usual with TW AUDiO products, the focus of the acoustic development with the C5i was also on low distortion and sound quality, but compared to the C5 the performance and the maximum level are reduced by 6 dB SPLmax. Due to the frequency response-optimized passive crossover, the low-impedance C5i with 6 ohm impedance is also suitable for operation on small standard amplifiers without DSP. Corresponding presets for Powersoft and Labgruppen amplifier platforms are also available.

The C5i is predestined for all budget-orientated but high-quality sound reinforcements, which do not require maximum SPL but excellent sound with even radiation.
For example, for near-field applications, demanding background sound systems in bars, restaurants, shopping centers, for smaller conference rooms or for short-throw sound systems in theaters, churches or prayer rooms.

All C5 accessories are also compatible with the C5i.

If you lend your product to another party, inform that party of the safety-related operating procedures and hand over this assembly guide. If you require additional copies of this manual, you can obtain them free of charge from TW AUDiO or download them from www.twaudio.de

Instructions in this user manual

Strictly adhere to the instructions contained in this operating manual that are marked as follows:

This symbol in combination with the signal word “Warning” identifies a potentially hazardous situation. Failure to comply with this safety instruction can lead to serious injury or even death.

This symbol in combination with the signal word “Warning” identifies a potentially hazardous situation for persons with a pacemaker. Failure to comply with this safety instruction can lead to serious injury or even death.

This symbol in combination with the signal word “Caution” identifies a potentially hazardous situation. Failure to comply with this safety instruction can lead to light or moderate injury.

This symbol in combination with the signal word “Note” identifies a potentially hazardous situation. Failure to comply with this safety instruction can lead to product damage.

This symbol in combination with the signal word “Tip” identifies additional information or notes that will simplify working with TW AUDiO products on the basis of practical experience.

Notes on the products

Read manual before use!

Before using the device, carefully read the operating manual and keep it with the C5i loudspeaker.

General information

Operation manual: OM-C5i
Version 2.0 en, 01/2022
© by TW AUDiO 2022; all rights reserved.

All information contained in this operating manual was correct to the best of our knowledge at the time of printing.

Quality warranties or assurance of suitability for a certain type of use based on the technical specifications, dimensions and weights are not granted by TW AUDiO.

TW AUDiO also shall not assume liability for any secondary damage (property damage and/or personal injury) nor for the failure to comply with this operating manual!

TW AUDiO reserves the right to update this document based on recent developments.

TW AUDiO INTERNATIONAL GmbH
Osterholzallee 140-2
71636 Ludwigsburg (Germany)

Phone : + 49 (0) 71 41-48 89 89 0
Fax: + 49 (0) 71 41-48 89 89 99
E-Mail: info@twaudio.de
WWW: www.twaudio.de

Content

1. Safety | Intended use 5
2. Overview 7
2.1 Components 7
3. Technical specifications 8
3.1 Data sheet 8
3.2 Connection diagram 8
4. Commissioning 9
4.1 Setup 9
4.2 Operation 9
4.3 Connecting the cable 10
5. Transport and Storage 11
6. CE Conformity Declaration 12
7. Disposal 13

1. Safety | Intended use

Please adhere to the following safety instructions to avoid risks when operating loudspeakers.

The C5i loudspeaker was developed for use in professional sound systems. The loudspeaker may only be used by trained and qualified personnel.

Note the operating modes described in this operating manual. Other uses are not permissible.

Damage caused by improper use is not covered by TW AUDiO.

WARNING

Loudspeakers generate an electromagnetic field. Persons with pacemakers are not permitted to remain in the immediate vicinity of loudspeakers as the electromagnetic fields can cause pacemakers to malfunction.

WARNING

Ensure that the units are in a stable position and are firmly attached. A falling loudspeaker can result in serious personal injury and property damage.

When using and assembling TW AUDiO loudspeakers, only use materials specified by TW AUDiO. These tasks must be performed by qualified personnel. Adhere to the applicable safety regulations.

NOTE

When setting up loudspeakers, ensure that they are not exposed to the following ambient conditions:

- Direct sunlight
- Humidity
- Jolting
- Dust

WARNING

Keep away from the immediate vicinity of loudspeakers that are operated at high sound pressure levels. These loudspeaker systems are capable of endangering your health. Sound levels beginning as low as approximately 90 dB SPL can lead to long-term hearing impairment.

NOTE

Avoid:

- Feedback
- Distorted signals (clipping) and
- Peaks resulting from switching on devices, plugging in devices or unplugging devices during operation.

Such signals can lead to loudspeaker overload and ultimately to loudspeaker failure.

Ensure that the loudspeaker is not exposed to permanent thermal overloads. Thermal overloads may cause a fire and result in serious personal injury and property damage.

Note that TW AUDiO does not provide a warranty for damage that can be attributed to this type of overload and therefore cannot be held liable for any secondary damage.

A permanent magnetic field is present in the immediate vicinity of loudspeakers. Ensure that objects which react sensitively to magnetic fields are not located in the immediate vicinity of the loudspeaker. In particular, this applies to magnetic storage media, magnetic stripe cards such as debit cards and CRT displays. A distance of approximately one meter is sufficient to avoid damage.

Check loudspeakers and accessory parts regularly for visible wear. This is essential to ensure continuing fault-free operation. Worn parts should be replaced immediately. Spare parts are available from TW AUDiO.

2. Overview

2.1 Components

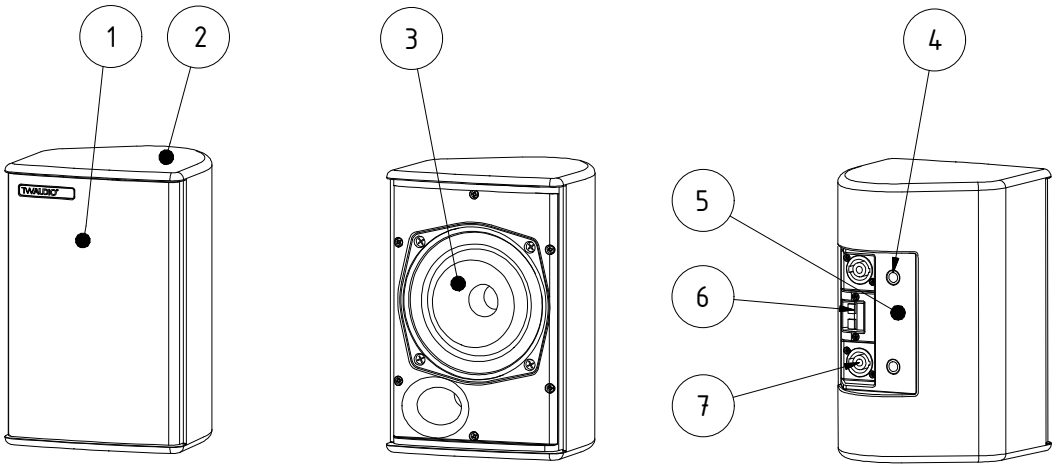


Figure 2.1 - Overview

1. Front grill
2. Integral rigid foam housing with Warnex-coated surface
3. 5“ cone driver
4. M10 threaded insert for attaching accessories (2 pieces)
5. Type label - white type label with black letters
6. Clamped connection: red (+) / black (-)
7. SpeakON® sockets (2 pieces)

3. Technical specifications

3.1 Data sheet

Drivers	1x 5“ LF / 1x 0,7“ HF
Frequency response	100 - 22000 Hz
Power handling (program/Peak)	100 / 200 W
Impedance	6 Ω
Coverage (h x v)	110° radial
Max. SPL / 1m	111 dB
Dimensions (h x w x d)	240 x 160 x 160 mm [9,45 x 6,30 x 6,30 in]
Weight	2,4 kg [5,3 lbs]
Surface	Warnex textured paint

3.2 Connection diagram

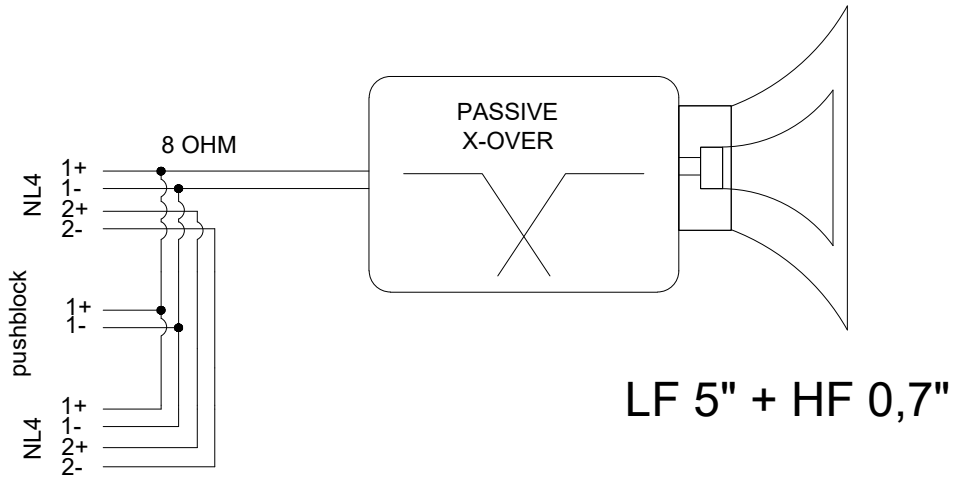


Figure 3.2 - Connection diagram

4. Commissioning

4.1 Setup

The C5i loudspeaker is designed for standing and hanging, vertical and horizontal operation. TW AUDiO provides a wide range of accessories to securely attach the loudspeaker.

Make sure that all system structures are located on a firm, level surface and that the surface can bear the total weight!

Make sure the speakers are securely fastened to prevent personal injury and property damage.

TW AUDiO recommends using only the accessories specified by TW AUDiO for securing and mounting loudspeakers.

4.2 Operation

C series loudspeakers can be operated on standard linear amplifiers. For optimal performance, we recommend using the system amplifiers and presets provided by TW AUDiO.

Before connecting the loudspeaker to the amplifier, ensure that the right preset has been loaded.

Using a wrong, out dated or a preset not provided by TW AUDiO can lead to destruction of the speaker.

Make sure that the amplifier's specifications meet the requirements. Using an amplifier that doesn't meet the specifications can destroy the loudspeaker.

Please note the technical data in section 3.1 on page 8.

4.3 Connecting the cable

To create a cable connection with an amplifier rack from TW AUDiO, proceed as follows.

NOTE

Ensure that the cable cross sectional area is sufficient (at least 1.5 mm^2) to avoid power losses. TW AUDiO recommends using the loudspeaker cables available from TW AUDiO.

When connecting the cables to the loudspeaker, ensure that polarity (+/-) and pin assignment (1/2) are correct. Incorrect connection can lead to a significant change in the loudspeaker's sound characteristics and may damage the driver.

The pin connections of the C5i loudspeaker can be found in section 3.2 ("Connection diagram") on page 8.

The internal wiring of the C5i loudspeaker allows for parallel connection of multiple loudspeaker units.

Please note that parallel connections will decrease the total impedance of your loudspeaker configuration.

The total impedance and the resulting power of the speaker configuration must match the output power of the amplifier.

5. Transport and Storage

NOTE

Ensure that the front grill of the loudspeaker is not damaged during transport and storage. A bent or broken front grill will no longer adequately protect the sensitive driver membranes.

In addition, larger dust deposits can significantly affect the functionality of a speaker membrane. This is why the product should be transported and stored in a safe, careful, dry and largely dust-free manner.

6. CE Conformity Declaration

Copy and translation of the original CE Conformity Declaration:

CE

We hereby declare that the below-referenced components by virtue of their design and construction, and in the configuration placed on the market by us, satisfy the safety and health requirements of the applicable EC directives. This declaration becomes invalid in case of modifications that have not been approved by us.

This declaration applies to the following components

- C5i

as well as all model variants based on these, provided that they correspond to the original factory models and have not been technically modified in any way.

Applicable directives:

- 2001/95/EG
- 2011/65/EU

Applicable national standards and technical specifications:

- DIN EN 18800
- DIN EN ISO 12100
- DGUV Vorschrift 17 und 18
- EN 50581: 2013-02

Berlin, Germany, January 1st, 2021

Bernhard Wüstner

7. Disposal

It is prohibited to dispose of used electrical equipment with household refuse.

All TW AUDiO INTERNATIONAL GmbH products are so-called B2B-products. This means that they are

symbol shown here may only be disposed of by TW AUDiO.

The loudspeaker owner is legally responsible for proper disposal of used devices that do not bear this symbol. This pertains to all products delivered prior to March 29, 2010. Nevertheless, TW AUDiO will also be happy to assist you in this case.

If you have any question regarding the disposal of used devices, please contact us under the following telephone number:

+49 (0) 71 41 - 48 89 89 0

Thus, TW AUDiO is in strict compliance with the Waste Electrical and Electronic Equipment Directive (2012/19/EU) for the protection of our environment.

TW AUDiO is registered under the following WEEE-reg.-no. with the German National Register EAR as a B2B-manufacturer and distributor of electrical devices:

DE93295191

In countries outside of the European Union, comply with local regulations.

TW AUDiO INTERNATIONAL GmbH
Osterholzallee 140-2
71636 Ludwigsburg (Germany)

Phone: + 49 (0) 71 41-48 89 89 0
Fax: + 49 (0) 71 41-48 89 89 99
E-Mail: info@twaudio.de
WWW: www.twaudio.de